

### **REMARKS**

Claims 1, 2, 6, 7 and 21 currently appear in this application. The Office Action of August 8, 2008, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

### **Claim Amendments**

Claim 1 has been amended to delete various informalities indicated by the Examiner. In addition, the genus *Bacillus* has been deleted from claim 1.

### **Claim Objections**

Claim 1 is objected to because it does not end with a period, the word "maltooligosaccharide" is misspelled at line 7, and there is an extraneous space within the chemical name at line 13.

The present amendment corrects these informalities.

### **Art Rejections**

Claims 1, 2, 6, 7 and 21 are rejected under 35 U.S.C. 102(b) as anticipated or, in the alternative, under 35 U.S.C. 103(a) as being obvious, over Yamamoto et al, US 5,137,723. The Examiner states that the mere fact that a characteristic of the enzyme of Yamamoto (e.g., the levels of AA-5G and AA-6G produced by its reaction with L-AA) was not disclosed by Yamamoto does not make methods employing that enzyme patentable. The Examiner, however, further states that clear evidence that the method and enzyme of the cited prior art does not possess a critical characteristic that is possessed by the claimed method and enzyme (i.e., the levels of AA-5G and AA-6G) would advance prosecution and might permit allowance of claims to applicant's method of using the enzyme.

In accordance with the Examiner's helpful suggestions, submitted herewith is a declaration by Dr. Nishimoto, along with Attachment A, Dr. Nishimoto's *curriculum vitae* and Attachment B, a list of Dr. Nishimoto's publications. Although Dr. Nishimoto is not an inventor of the subject application, Dr. Nishimoto is an expert in various glycosyl transferring enzymes and the uses thereof. Dr. Nishimoto oversaw the research as a supervisor of Mr. Mukai, who is one of the inventors. Furthermore, it is Dr. Nishimoto who discovered an  $\alpha$ -isomaltosylglucosaccharide-forming enzyme in the microorganism of genus *Bacillus*.

The attached declaration demonstrates how the  $\alpha$ -isomaltosylglucosaccharide-forming enzyme of claim 1 differs from the rat intestine  $\alpha$ -glucosidase (RIAGase) disclosed in Yamamoto.

As described in the declaration, the experimental data clearly demonstrate that  $\alpha$ -isomaltosylglucosaccharide-forming enzyme of claim 1 significantly differs from the RIAGase in the

productivity of 2-O- $\alpha$ -glucopyranosyl-L-ascorbic acid (AA2G), 5-O- $\alpha$ -glucopyranosyl-L-ascorbic acid (AA5G) and 6-O- $\alpha$ -glucopyranosyl-L-ascorbic acid (AA6G).

As defined in claim 1, the claimed process is characterized, for example, by the composition of the reaction mixture, which contains AA-2G in an amount of 10% w/w or greater, while the amounts of AA-5G and AA-6G are present in an amount less than 0.1% w/w.

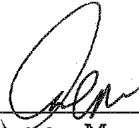
This process is not disclosed in Yamamoto, and as demonstrated above, the enzymes are quite different. Therefore, it is respectfully requested that the rejection be withdrawn.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Appln. No. 10/523,920  
Amd. dated January 7, 2009  
Reply to Office Action of August 8, 2008

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.  
Attorneys for Applicant

By:   
Anne M. Kornbau  
Registration No. 25,884

AMK:srd  
Telephone No.: (202) 628-5197  
Facsimile No.: (202) 737-3528  
G:\BN\S\SUMA\MUKAI2\pto\2008-01-07Amendment.doc